

SR 167 Extension Comprehensive Tolling Study Round 2 Draft Results

WSDOT SR 167 Tolling Study Team

David Dye
Deputy Secretary

Paula Hammond
Secretary of Transportation

Steve Reinmuth
Chief of Staff

What We Are Doing Today

- Discuss the public outreach plan
- Quick refresher of last meeting materials
- Answer the questions raised at the last meeting
- Select options to carry into financial analysis



Public Information Plan

A vital component of the toll study

Goal

- To gauge community support for generating funds to construct the SR 167 extension.

Communications objectives/desired outcomes

- Build understanding, inform decision makers
- Engage decision makers and the public

Public Information Plan

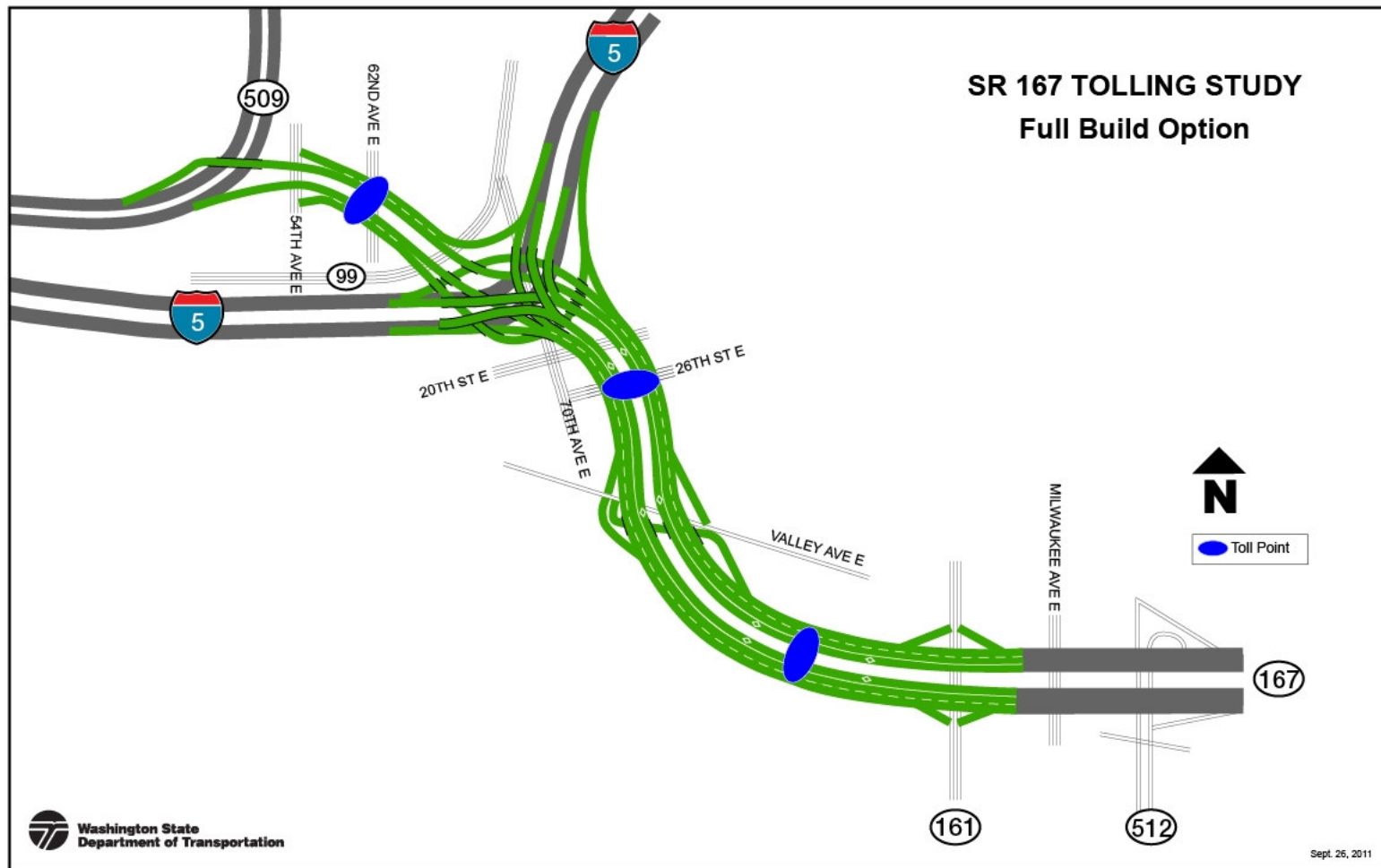
Strategies and Tools

- Leverage existing networks
- Website - <http://wsdot.wa.gov/Tolling/SR167extension/>
- Media outreach
- Social Media
- E-mail
- Public meeting/open house:
- Outreach to key stakeholders and elected officials
- Public opinion surveys
- Travel display

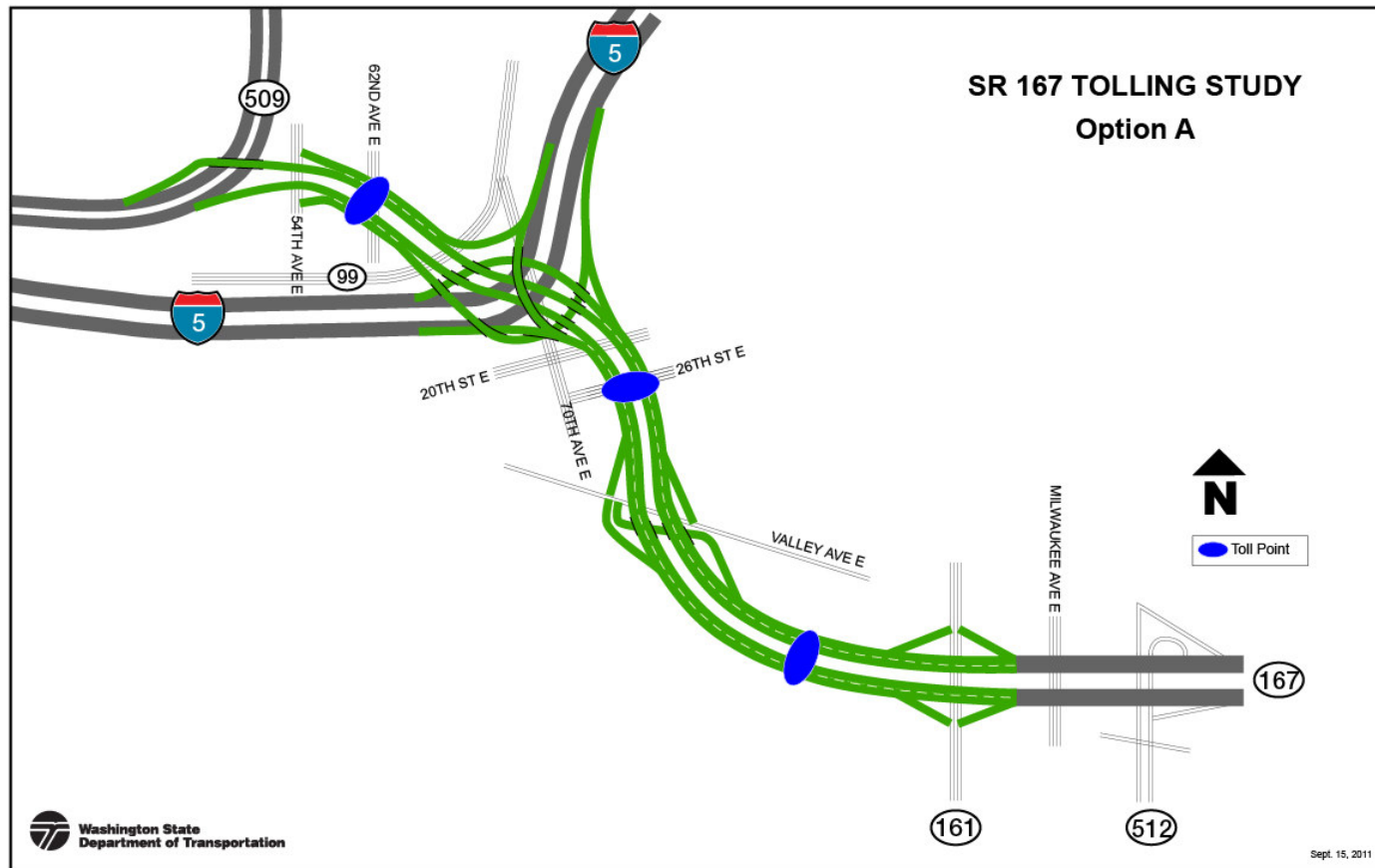
Quick Refresher

- **Presented preliminary results:**
 - Daily revenue
 - Extension usage
 - Subarea performance
 - Corridor performance
- **Evaluated four scenarios:**
 - Full Build
 - 3 Options

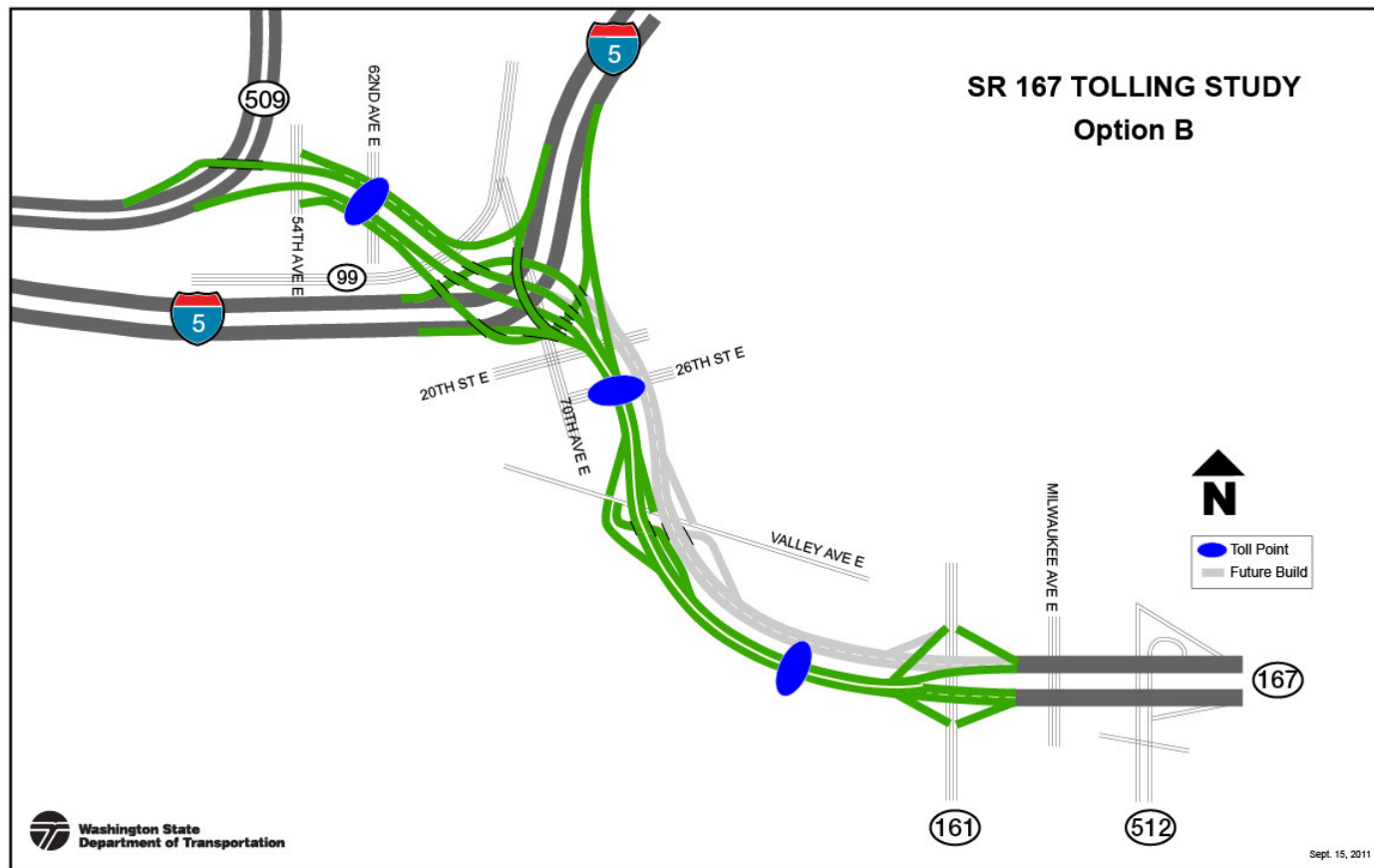
Full Build (formerly Option 1)



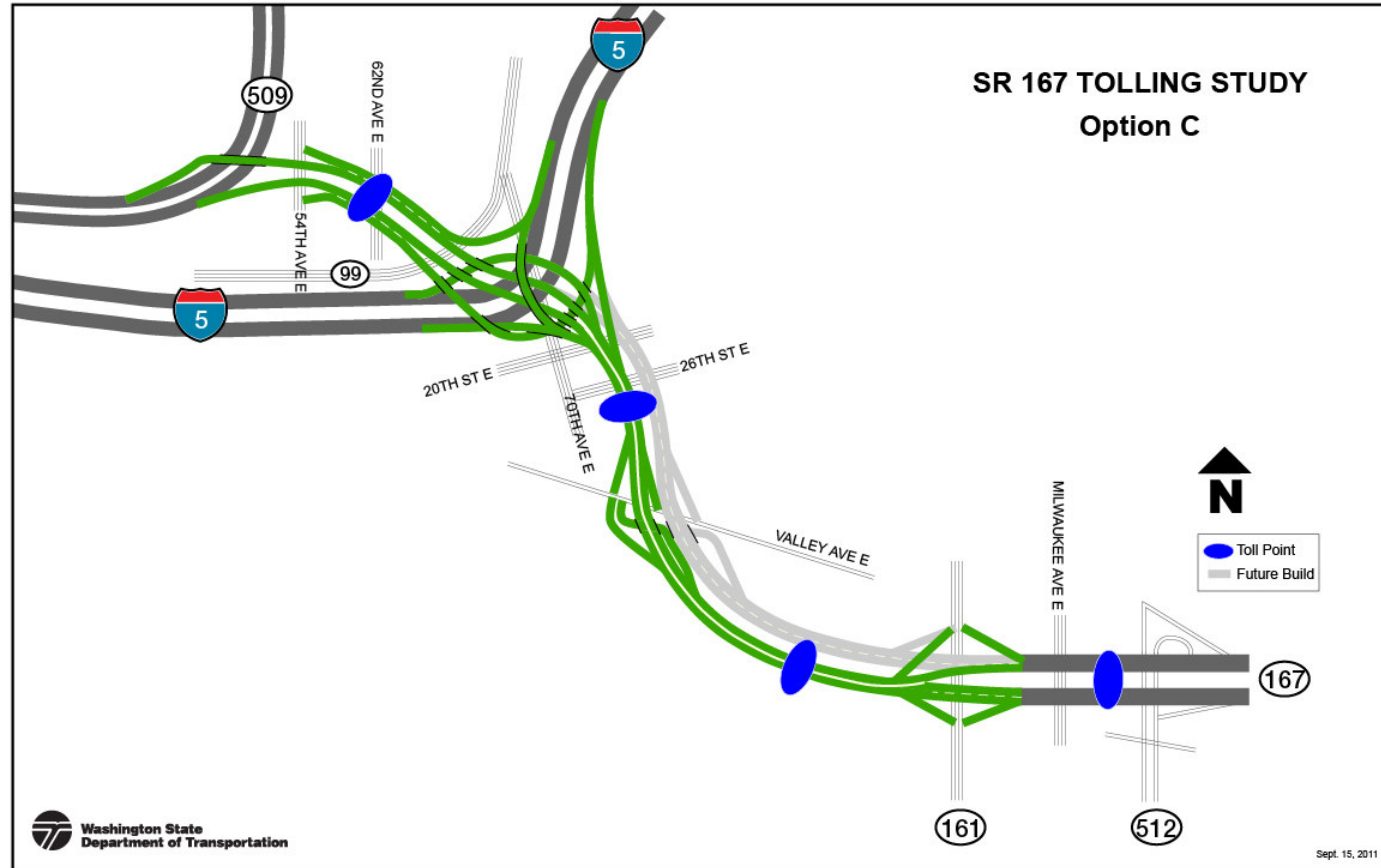
Option A (formerly Option 2)



Option B (Formerly Option 9A)



Option C (Option B plus toll existing SR 167)



What We Heard from You at the Last Meeting?

- Continue evaluating:
 - Full Build, Options A and B
- Continue to carry Option C
 - Answer key questions then decide whether or not to carry forward



What We Heard from You at Last Meeting?

- What are the planned projects in the study area?
- How are employment/population growth estimates assumed for each option?
- Present more information to support freight mobility
- How many trucks/autos enter the study area for different options
- What if only trucks are tolled in the entire project?
- Follow-up & engage w/ the Washington Trucking Association

What We Heard from You at Last Meeting?

Cont.

- Options spreadsheet update
 - What is the revenue of each segment and what is the revenue's % of the cost of that segment?
 - How much does toll equipment cost?
- What are system and daily performance levels in addition to subarea and peak periods?
- How much travel time saving is projected on the corridor from the Port to I-90?

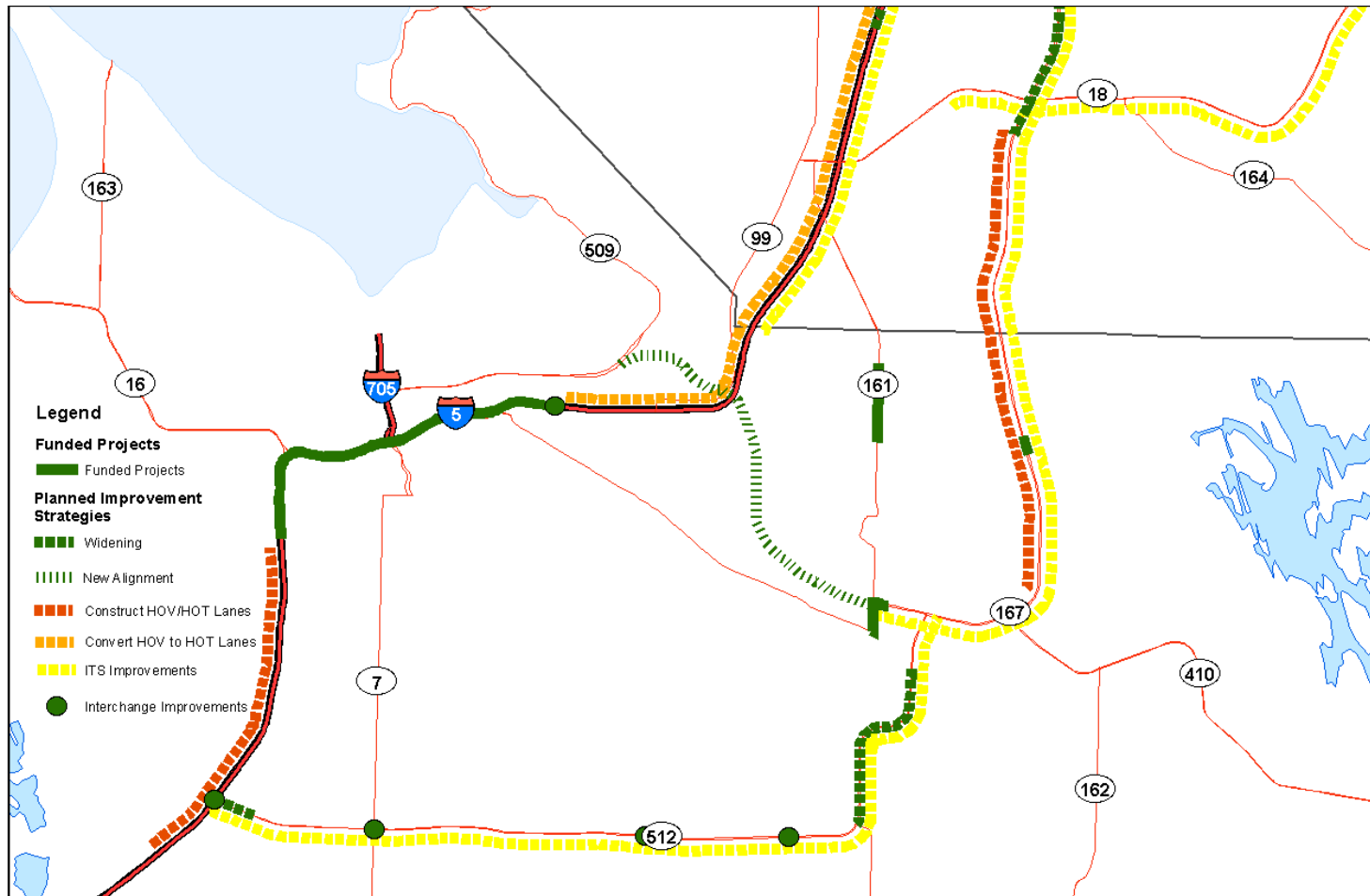
Option C Key Questions

- How will tolling east of SR 161 affect traffic diversion in the Puyallup area?
- What if only trucks are tolled east of SR 161?
- How does tolling existing roadway affect low-paid jobs commuter
- Remove it or keep it?

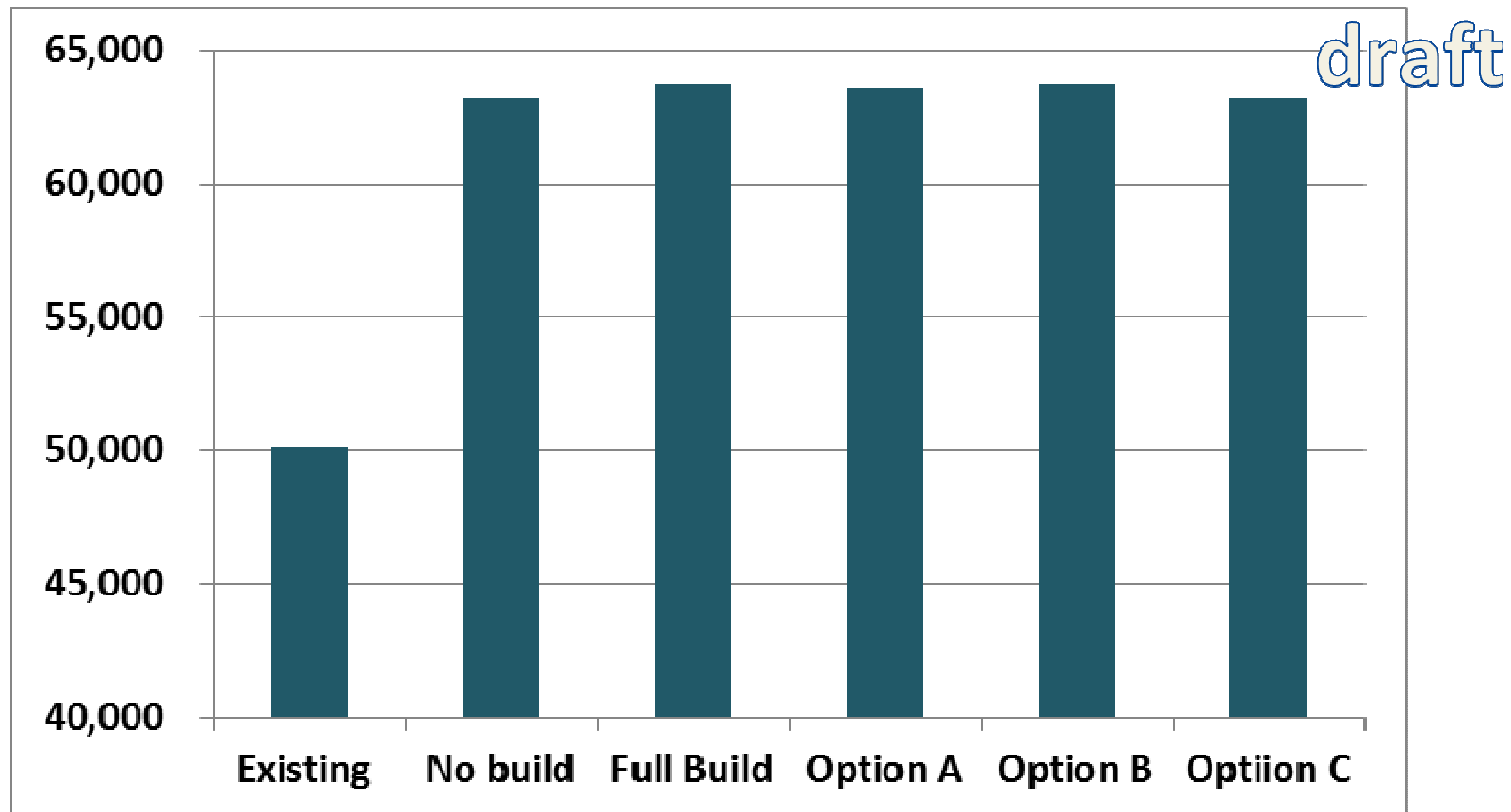
To answer some of the key the
questions



Planned/funded projects in the study area

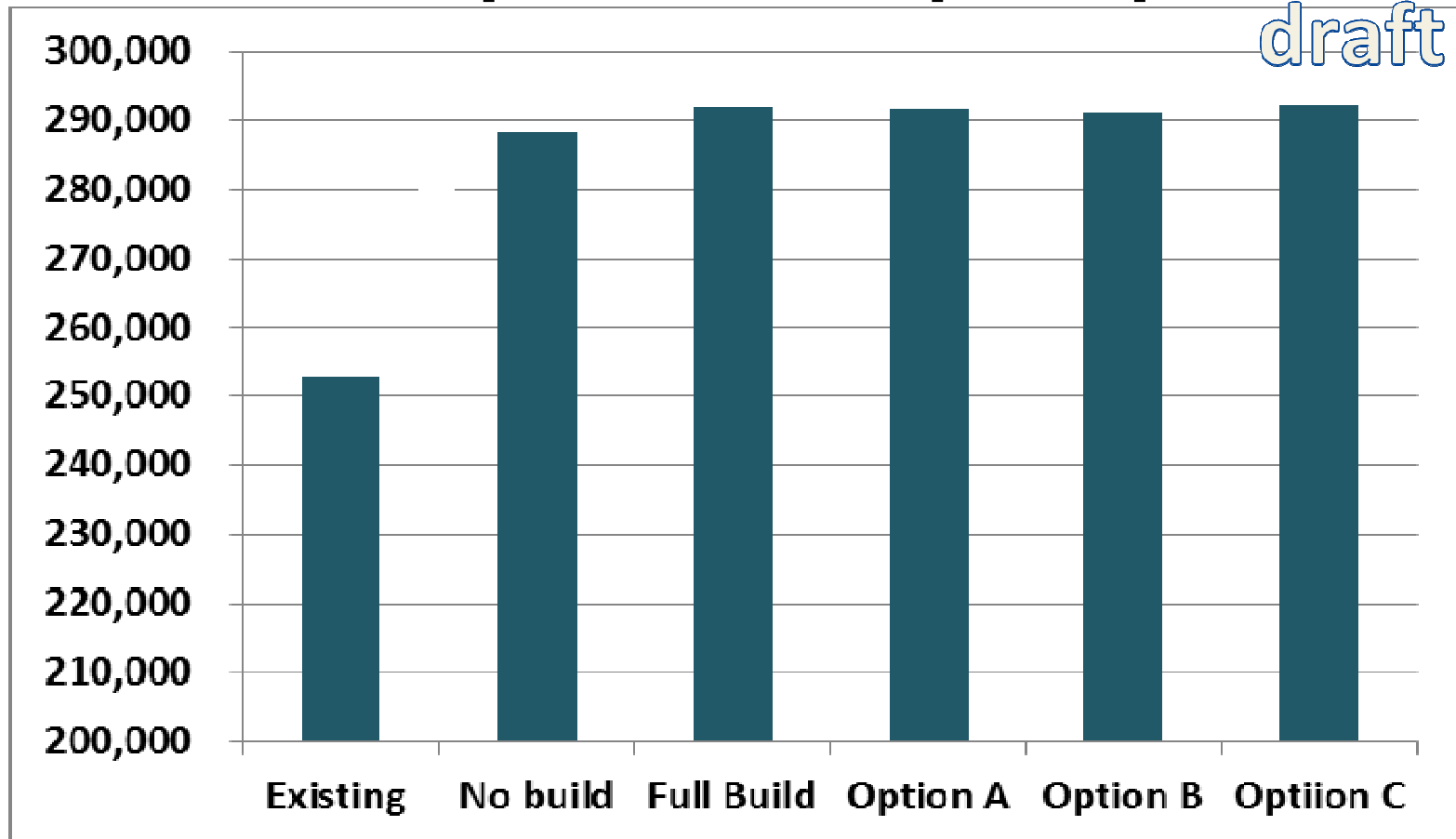


How many trucks entering the study area for different options? PM peak period



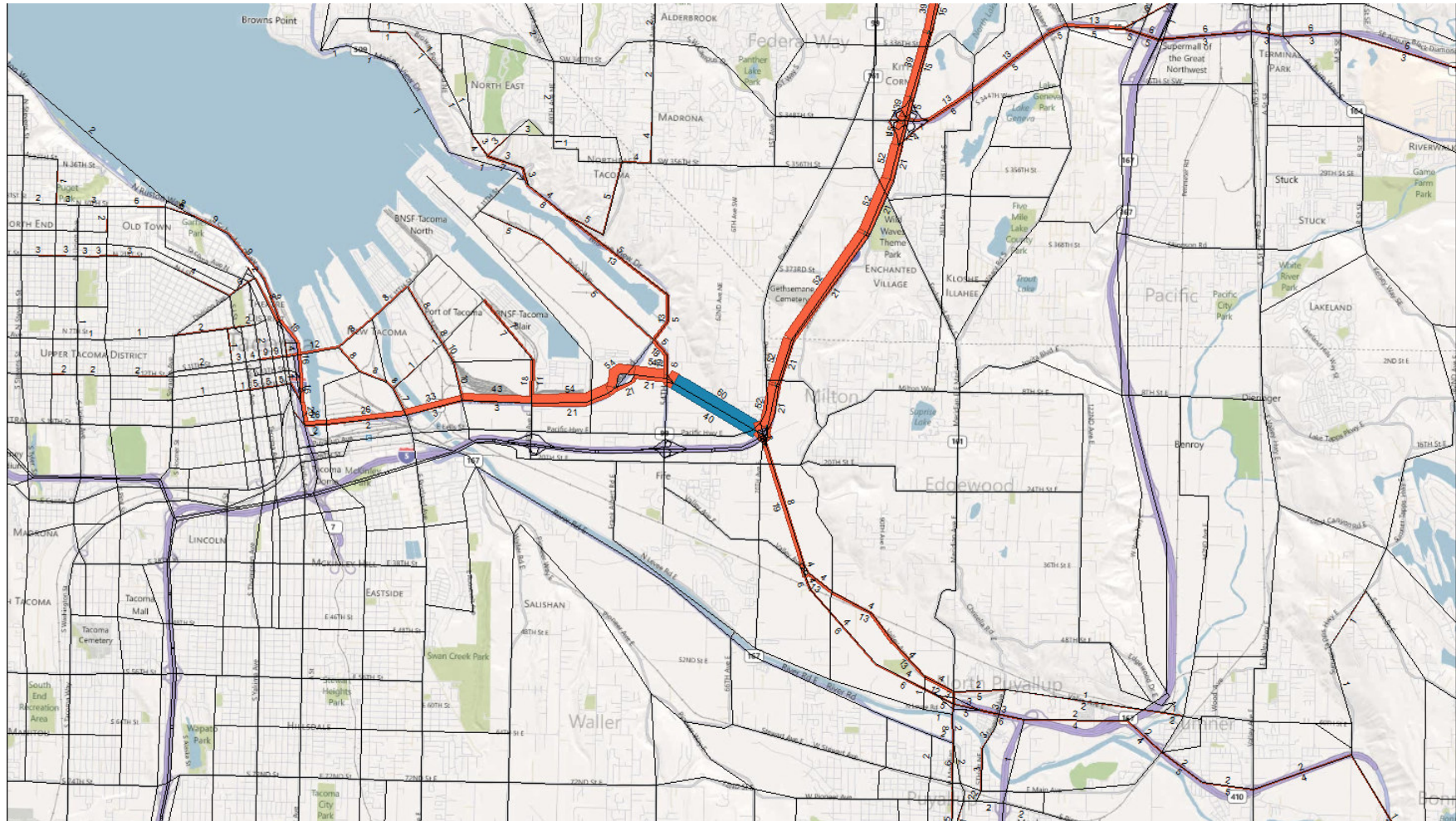
* Note: Options A, B and C are tolled, all other options are toll free.

How many autos entering the study area for different options? PM peak period

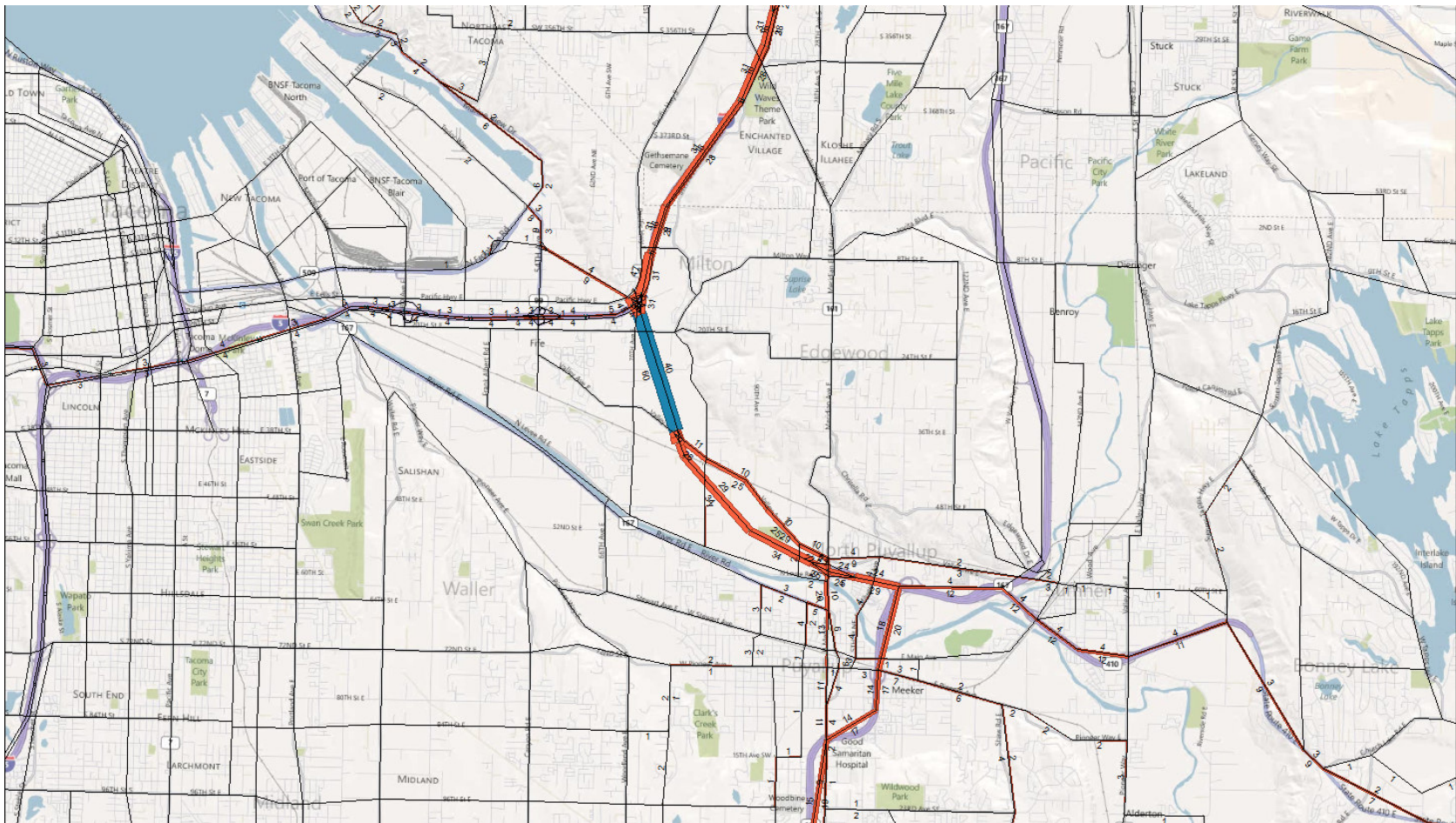


* Note: Options A, B and C are tolled, all other options are toll free.

Where the Trips are coming from and going to?



Where the trips are coming from and going to?



Updated Options Sheet

draft

Options	PE, RW, CN Cost (2008 \$)	Toll Equip. Cost	2030 Daily Gross Revenue			Net Toll Funding Capacity	Funding Gap
			Auto	Trucks	Total		
No - Build	-----	-----	-----	-----	-----		
Full Build	\$1,636 M	\$12 M	\$46,300	\$10,600	\$56,900		
Option "A": Two lanes, full I/Cs	\$1,470 M	\$12 M	\$46,300	\$10,600	\$56,900		
Option "B": One lane & full I/C s	\$1,066 M	\$9 M	\$45,500	\$10,500	\$56,000		
Option "C" One lane & full I/Cs	\$1,066 M	\$12 M	\$57,300	\$10,200	\$67,500		



Cost and Gross Revenue by Segments (in \$1,000)

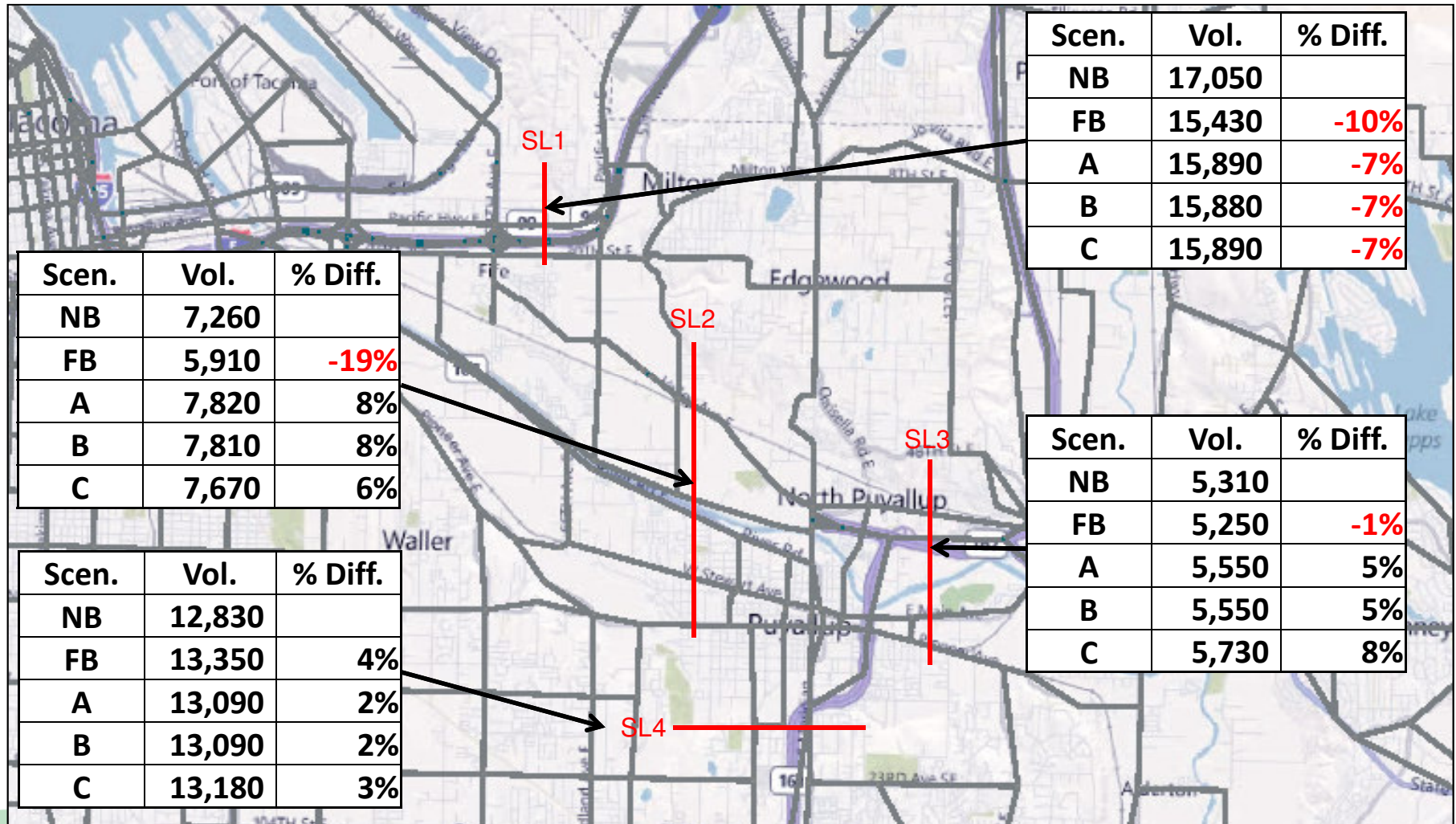
draft

Options	W of I-5		I-5 to Valley		Valley to SR 161	
	Cost	Revenue	Cost	Revenue	Cost	Revenue
No - Build		-----		-----		-----
Full Build	\$456,000	\$ 8.9	\$888,000	\$ 27.8	\$ 293,000	\$ 20.1
Option "A": Two lanes, full I/Cs	\$456,000	\$ 8.9	\$735,000	\$ 27.8	\$ 280,000	\$ 20.1
Option "B": One lane & full I/Cs	\$456,000	\$ 8.9	\$435,000	\$ 27.4	\$ 175,000	\$ 19.6
Option "C" One lane & full I/Cs	\$456,000	\$ 9.4	\$435,000	\$ 23.1	\$ 175,000	\$ 16.9

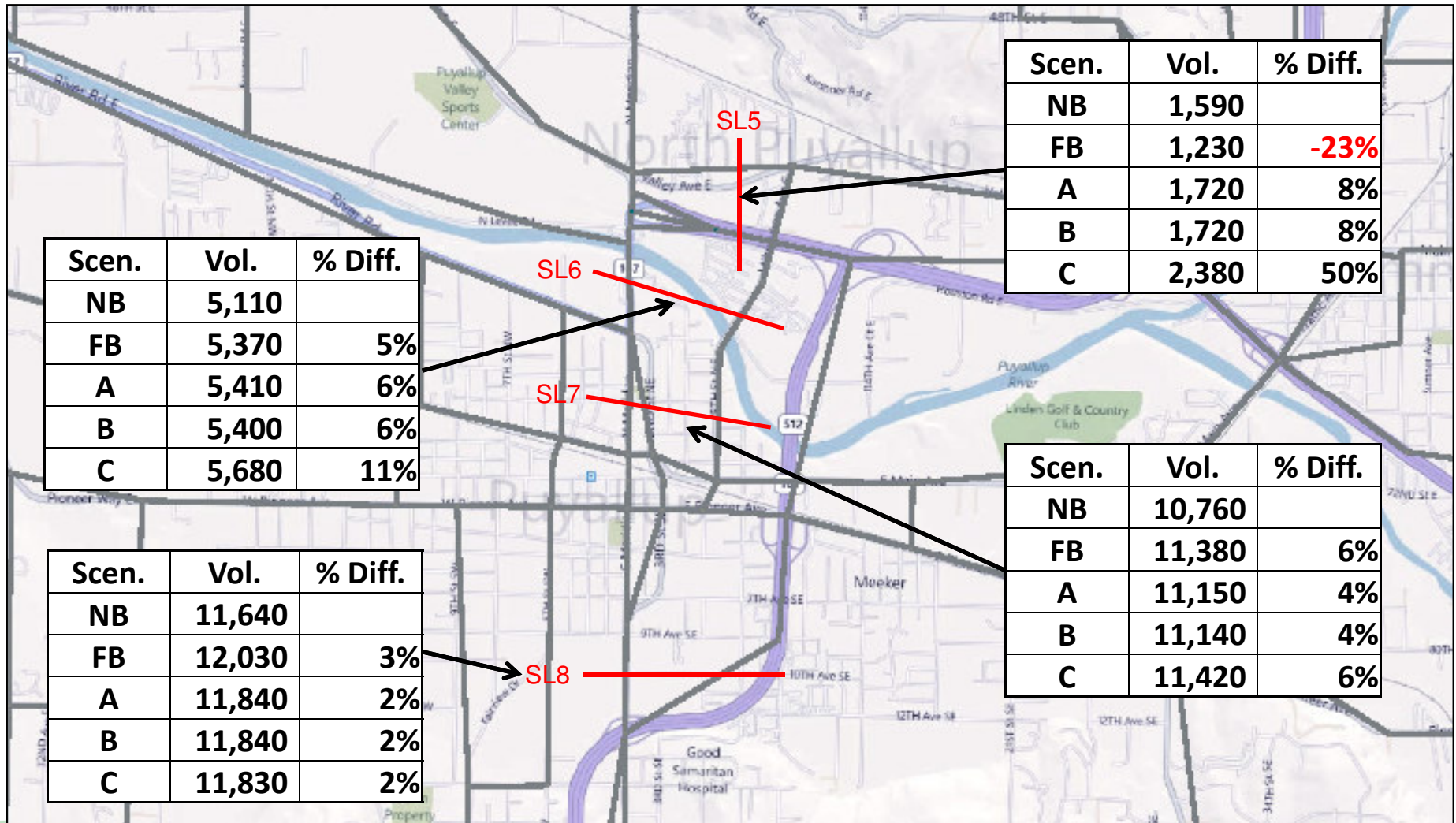
How tolling east of SR 161 affect traffic in the Puyallup area?



Traffic Diversion in the Study Area at Screen Lines Compare to No-Build (SR 167 traffic is excluded) draft



Traffic Diversion in the Puyallup Area at Screen Lines Compare to No-Build (SR 167 traffic is excluded) draft



What if only trucks are tolled east of SR 161?

draft

Time period	Tolls				Trucks	Revenue
	Peak Direction		Off-Peak Direction			
	Medium Trucks	Heavy Trucks	Medium Trucks	Heavy Trucks		
AM	\$ 1.15	\$ 1.90	\$ 0.75	\$ 1.25	310	\$ 350
PM	\$ 1.50	\$ 2.52	\$ 0.90	\$ 1.45	450	\$ 560
Daily					2,440	\$ 2,300

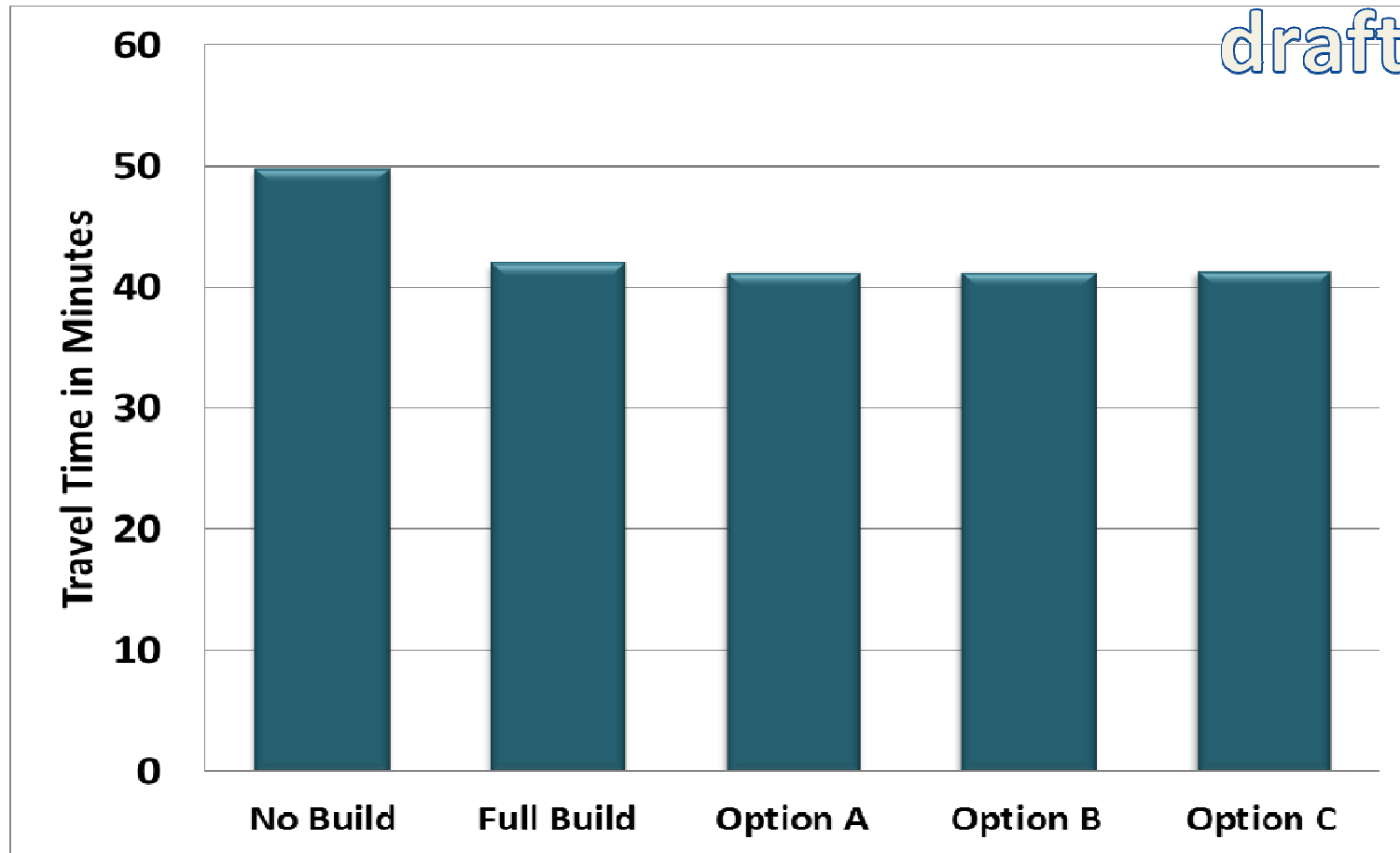


Round 1 Results Update



Washington State
Department of Transportation

Travel Time Update for the corridor from the Port to I-90 – 2030 PM Peak Period

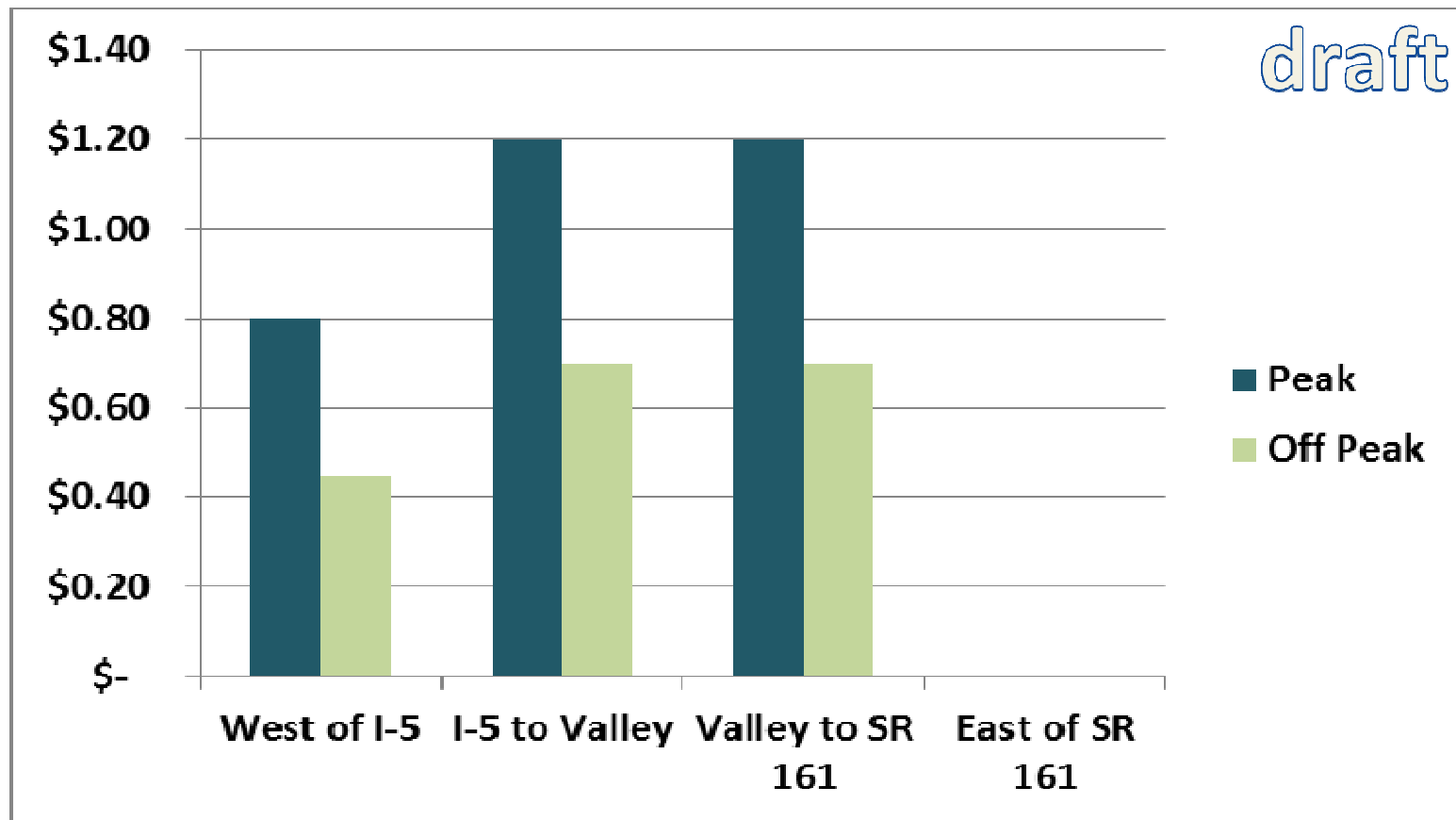


* Note: Options A, B and C are tolled, all other options are toll free.

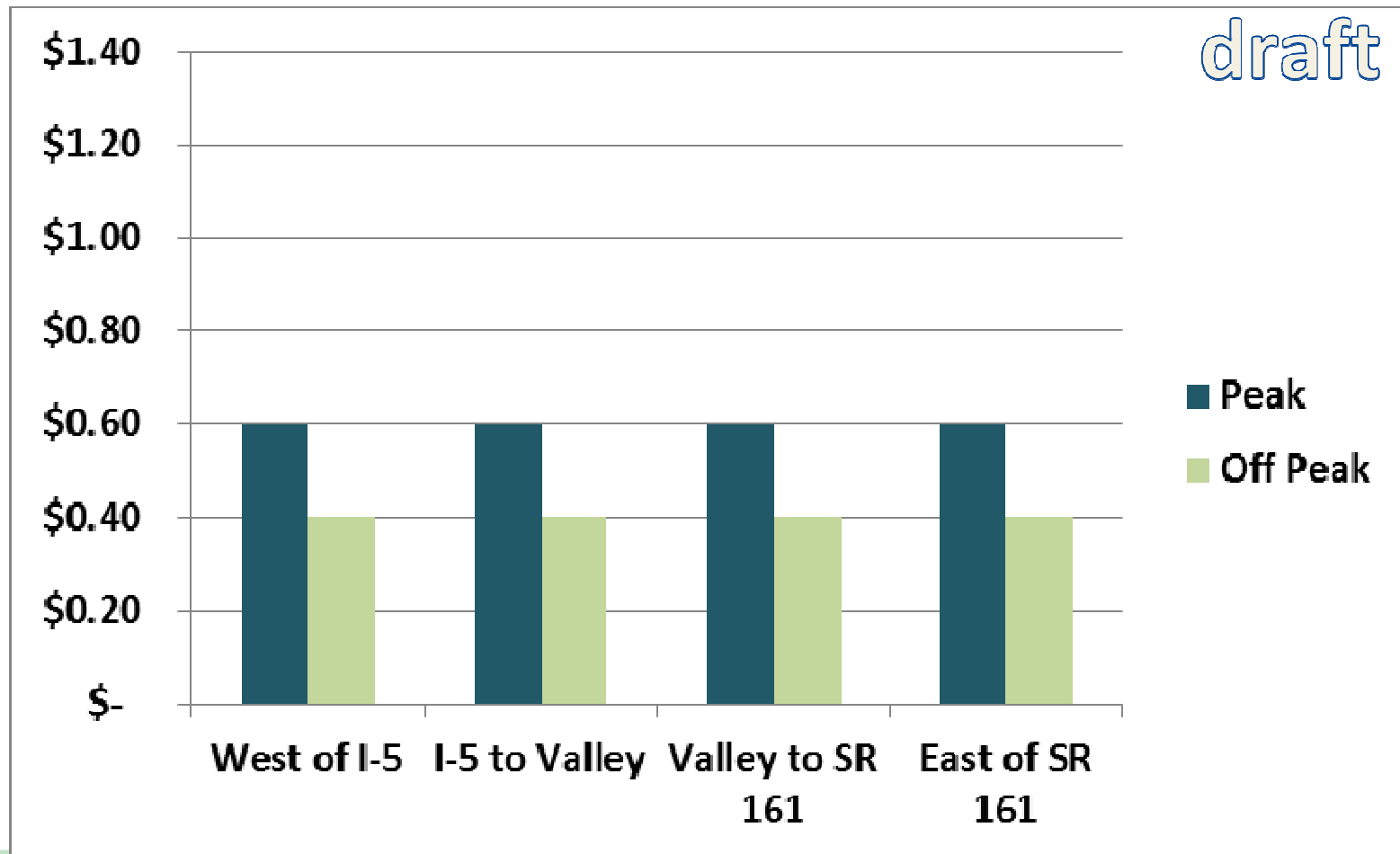
Full Build, Option A & B Toll Rates by Segment – AM Peak Period



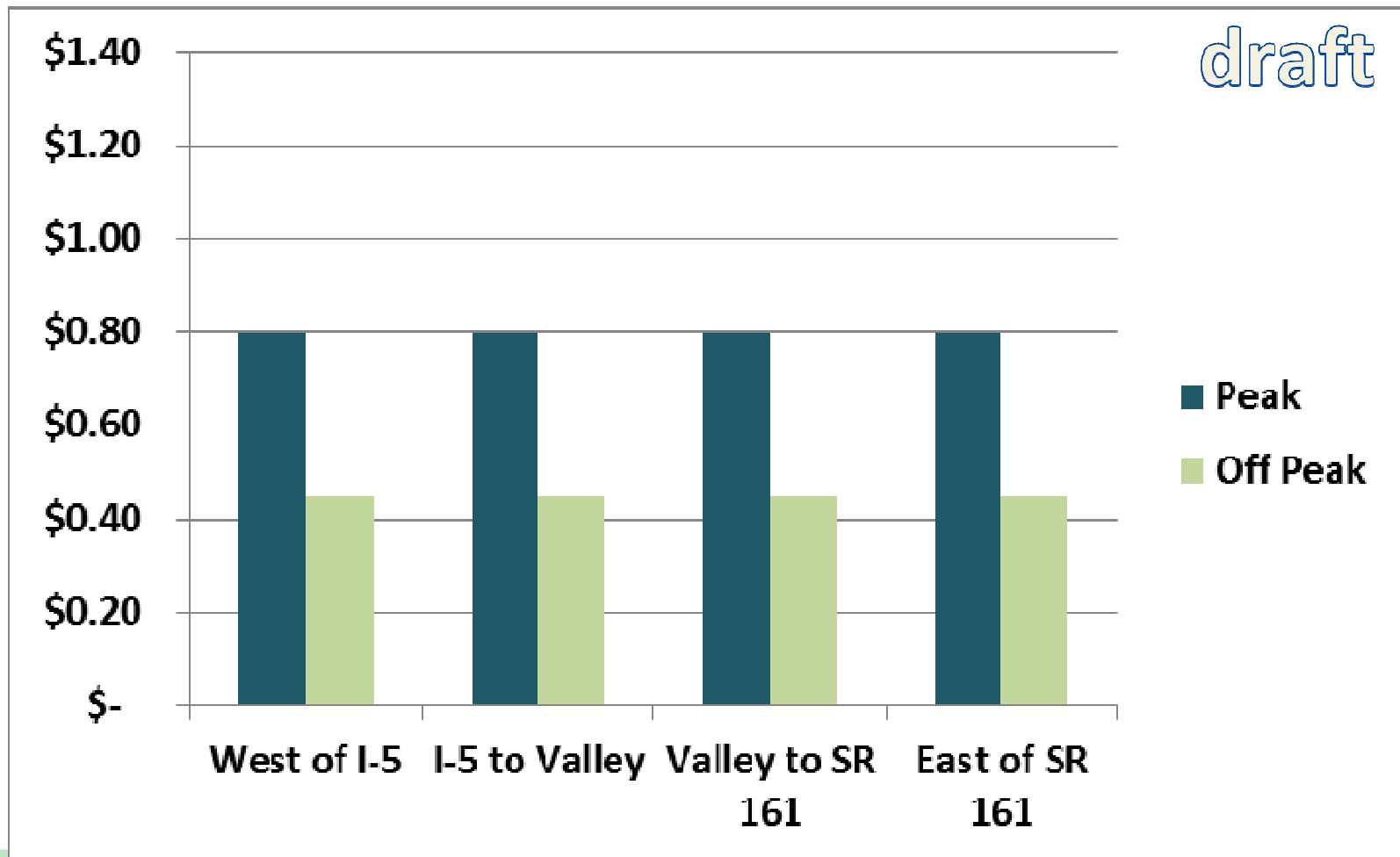
Full Build, Option A & B Toll Rates by Segment – PM Peak Period



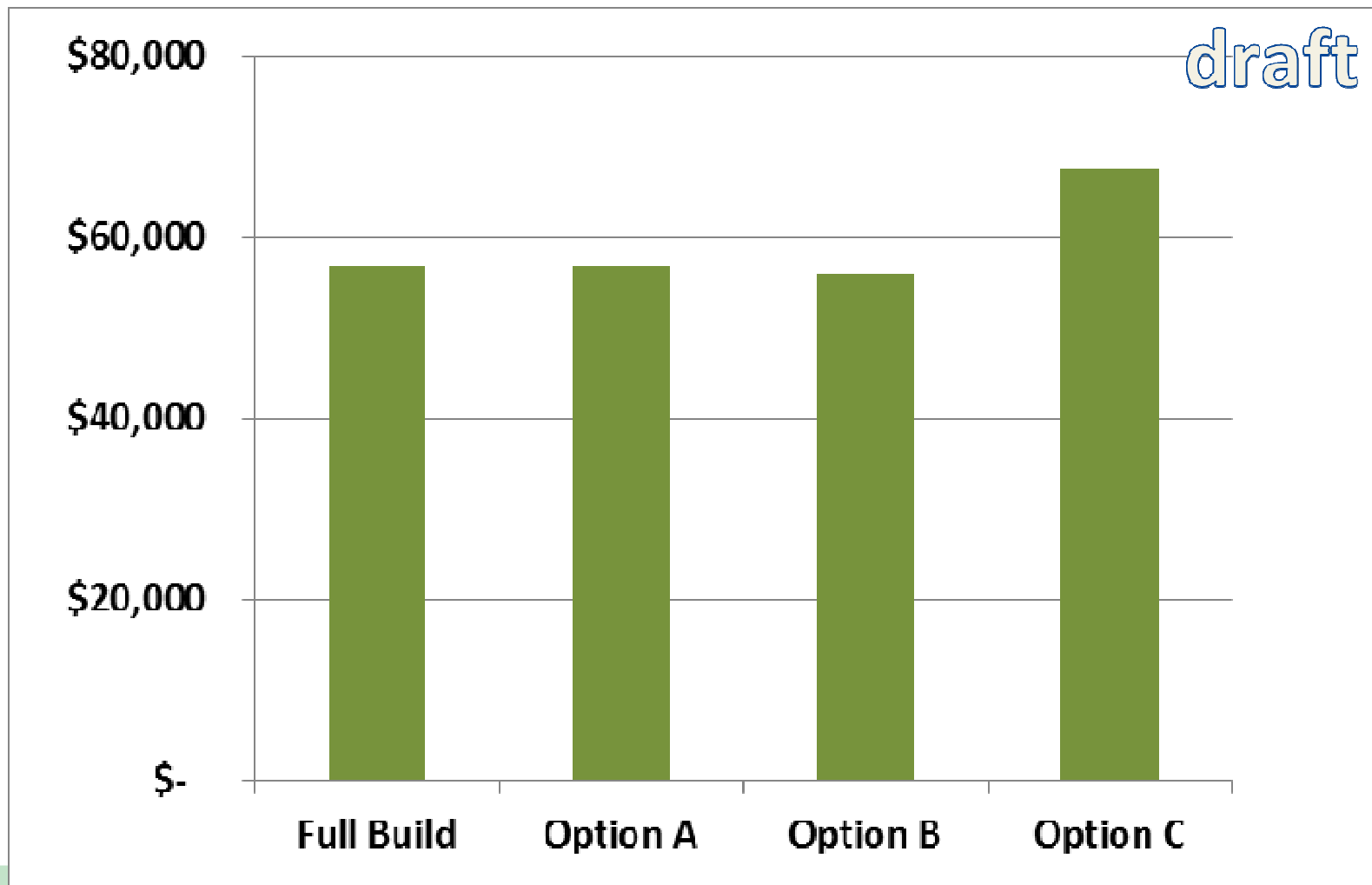
Option C Toll Rates by Segment – AM Peak Period



Option C Toll Rates by Segment – PM Peak Period

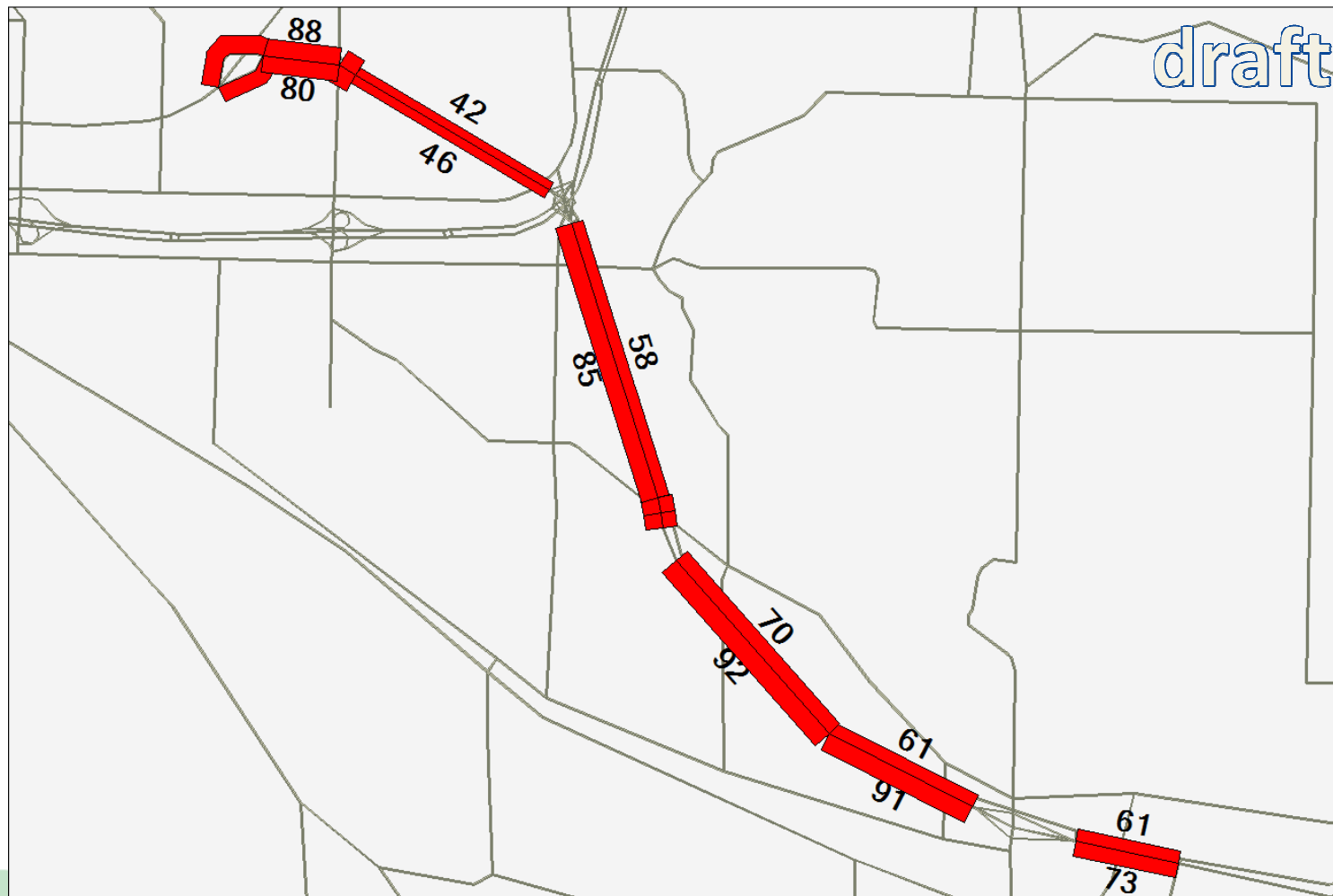


Estimated 2030 Weekday *Gross* Toll Revenue



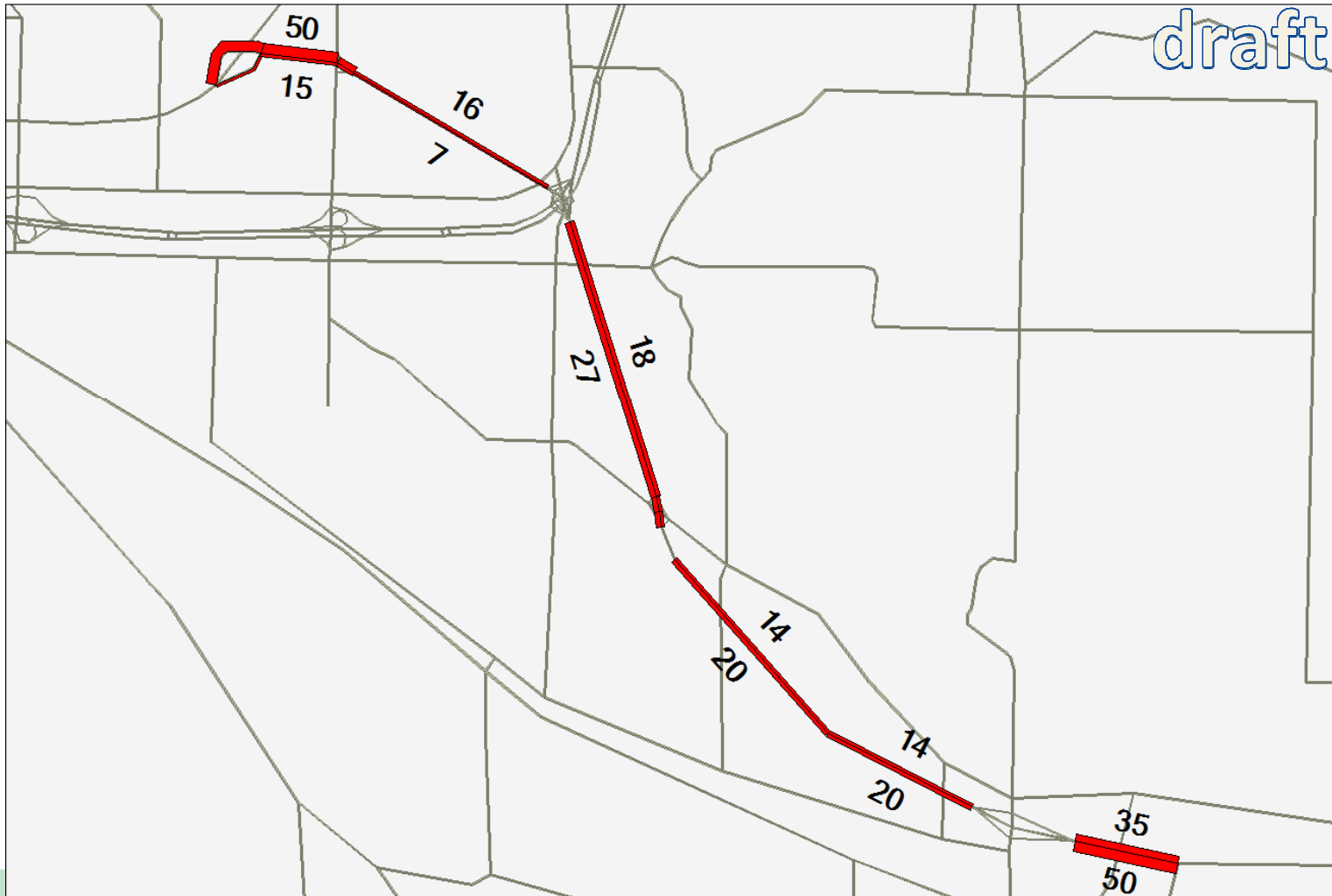
Full Build Extension Utilization

2030 PM Peak Percentage of Volume to Capacity Ratio



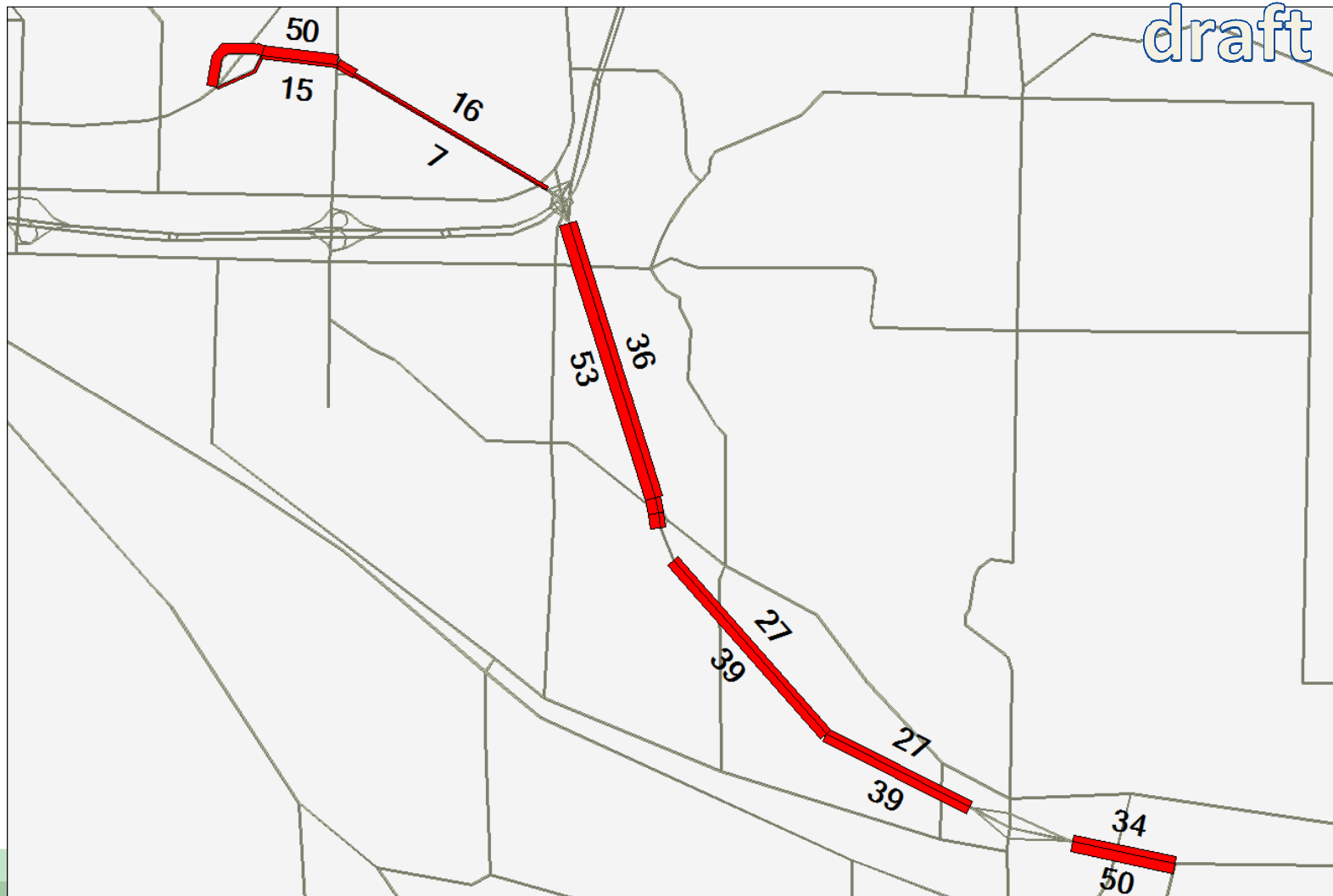
Option A Extension Utilization

2030 PM Peak Percentage of Volume to Capacity Ratio



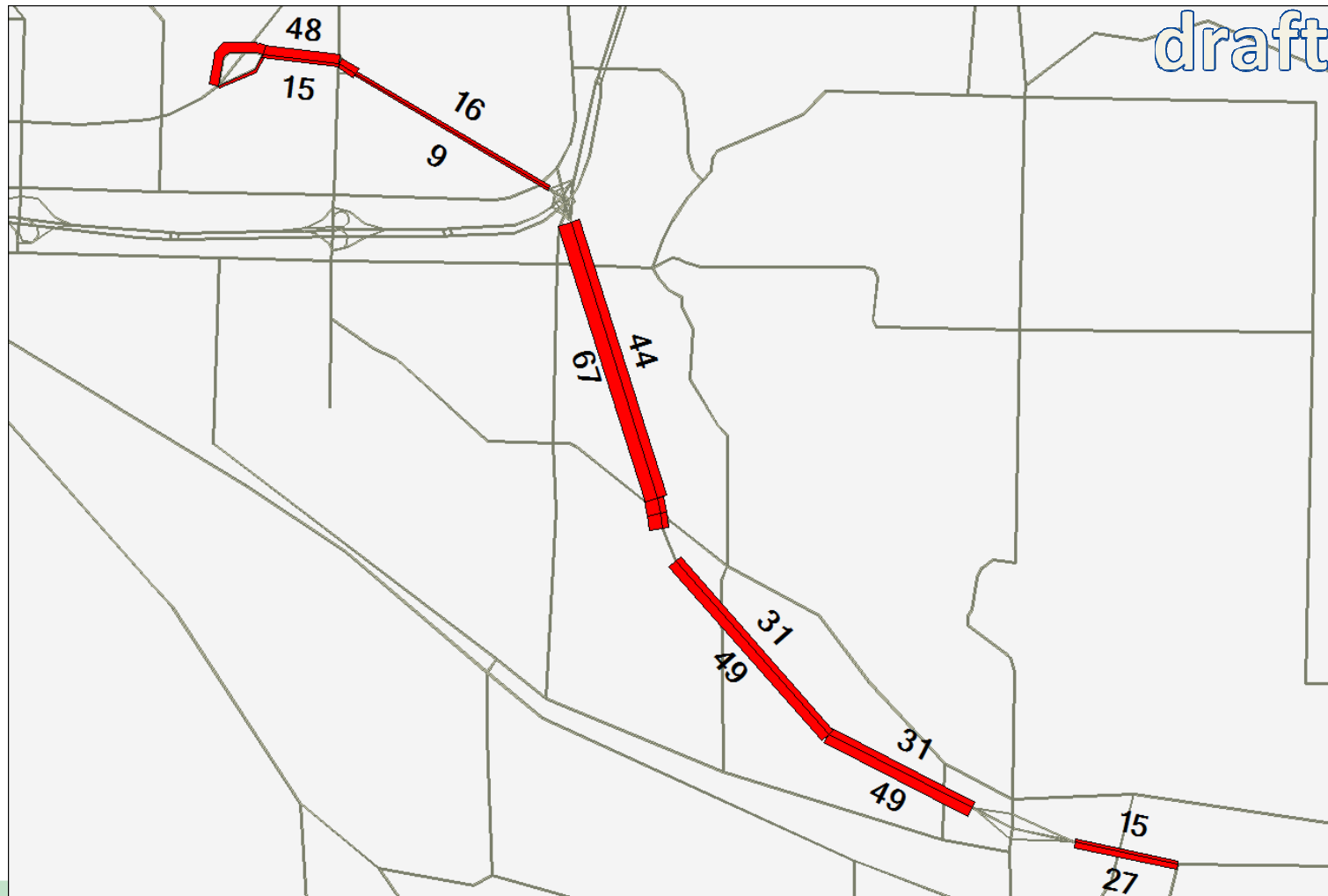
Option B Extension Utilization

2030 PM Peak Percentage of Volume to Capacity Ratio

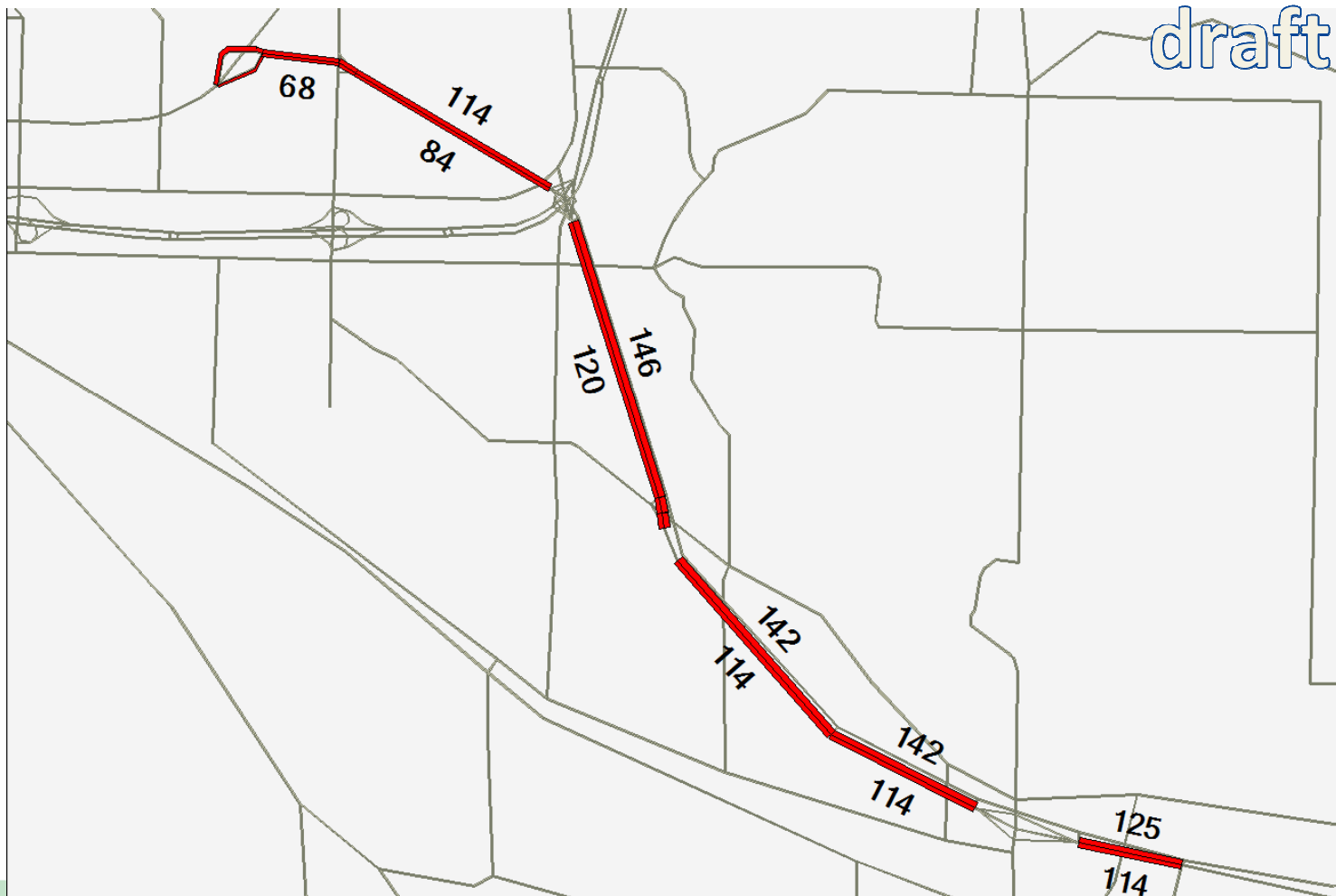


Option C Extension Utilization

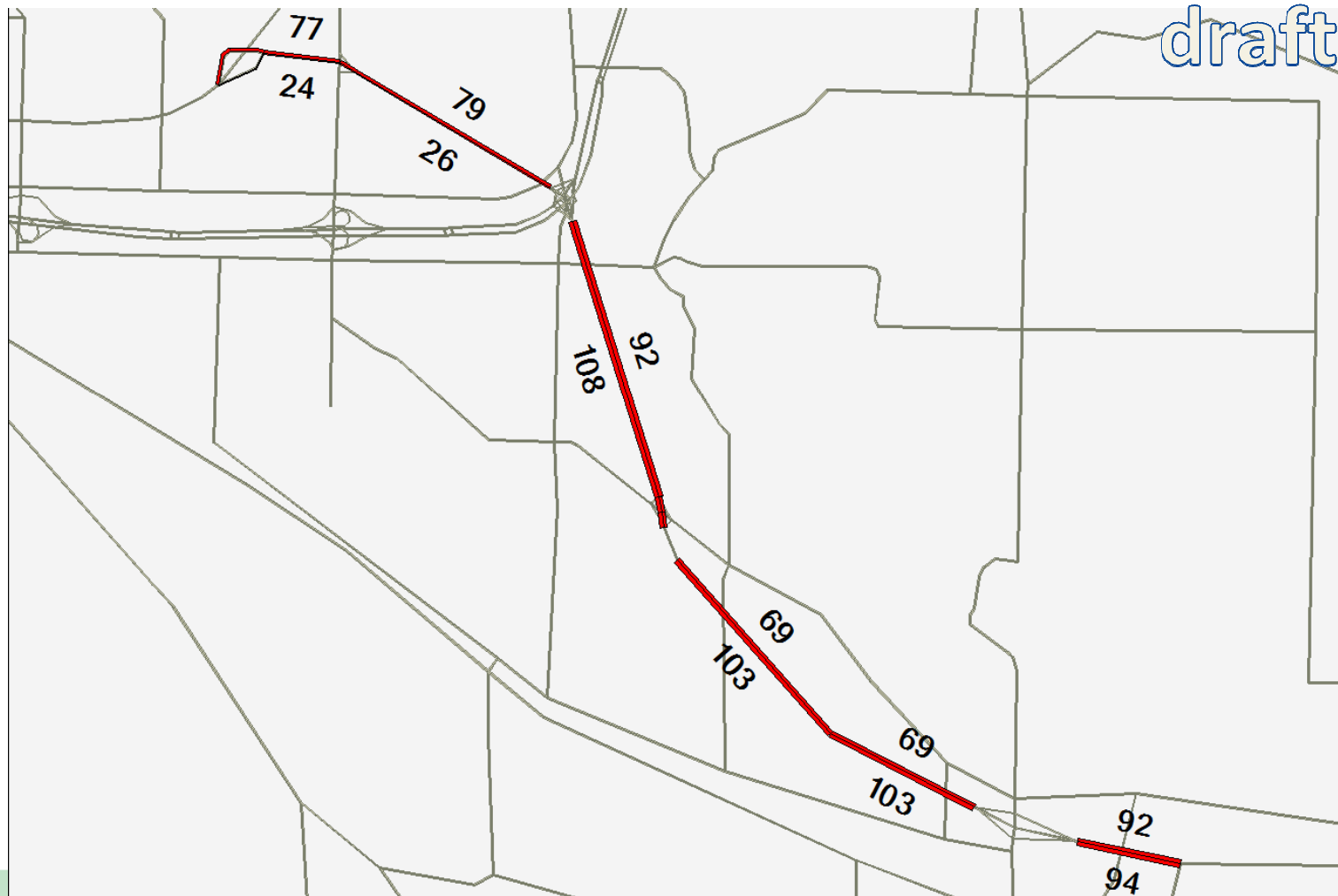
2030 PM Peak Percentage of Volume to Capacity Ratio



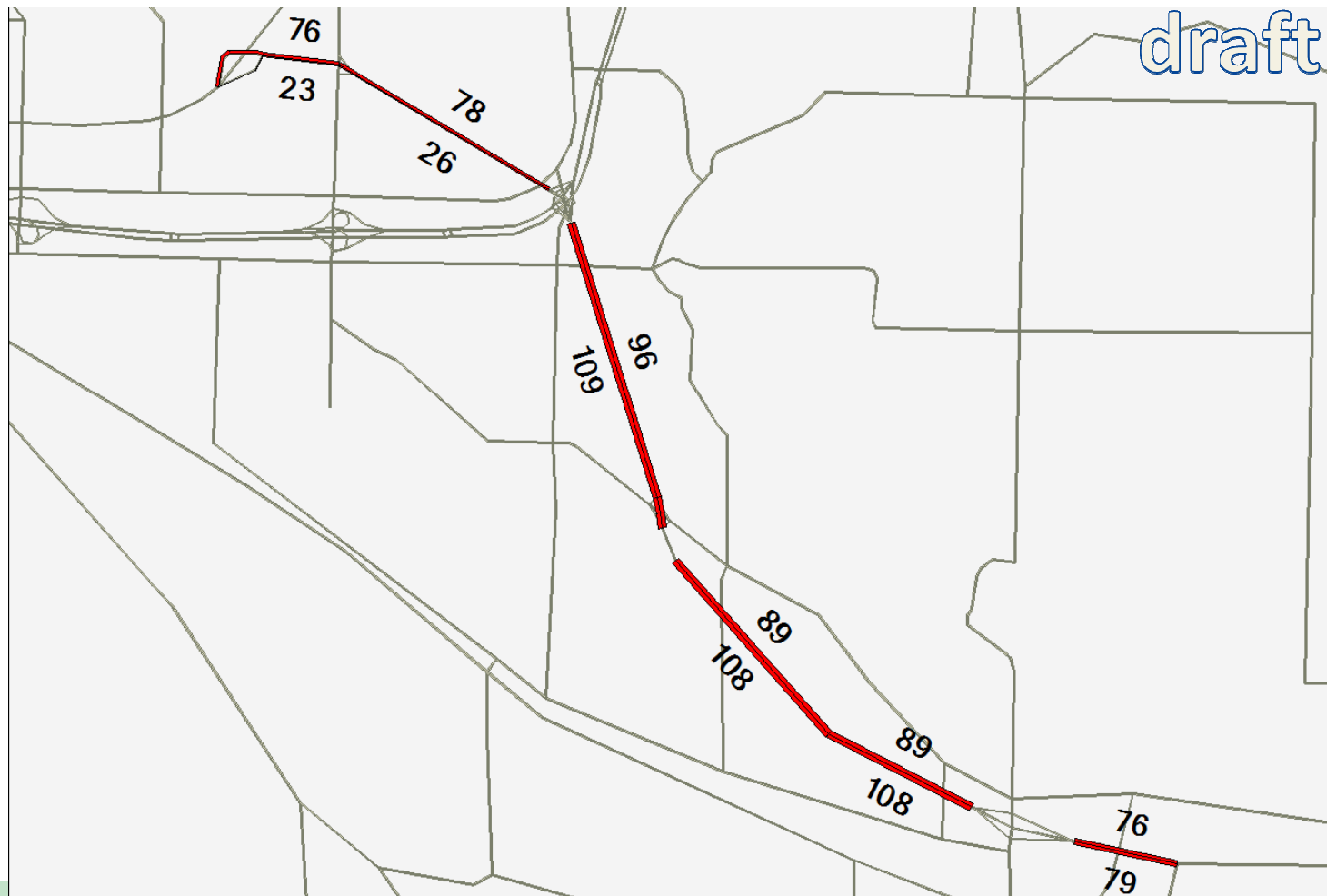
2030 Full Build – Truck Volume per Hour (medium & Heavy trucks – 3+ Axles)



2030 Option A & B – Truck Volume per Hour (medium & Heavy trucks – 3+ Axles)



2030 Option C – Truck Volume per Hour (medium & Heavy trucks – 3+ Axles)



Summary Findings

- Toll options designed for revenue generation are expected to reduce traffic demand by at least half on the extension
- In the four toll scenarios, traffic demand on the extension can be accommodated by one lane in each direction.
- According to model analysis, number of trucks and autos entering the study area do not expect to be significantly different across the scenarios studied.
- Underlying employment and population growth scenarios used in the analysis are associated with the full build option and are consistent with local and regional plans.

Summary Findings Cont'd

- Spreading a portion of the toll on the extension to the existing SR 167 just east of SR 161 is expected to:
 - Increase the total revenue
 - Increase the utilization on SR 167 extension
 - Cause diversions to Puyallup streets but most of the “diversions” are expected to be under 10%
 - The impact on low income commuters will need to be further evaluated
- Tolling only trucks east of SR 161 is expected to generate about \$2300 a day.

Selecting/Refining Options for Financial analysis



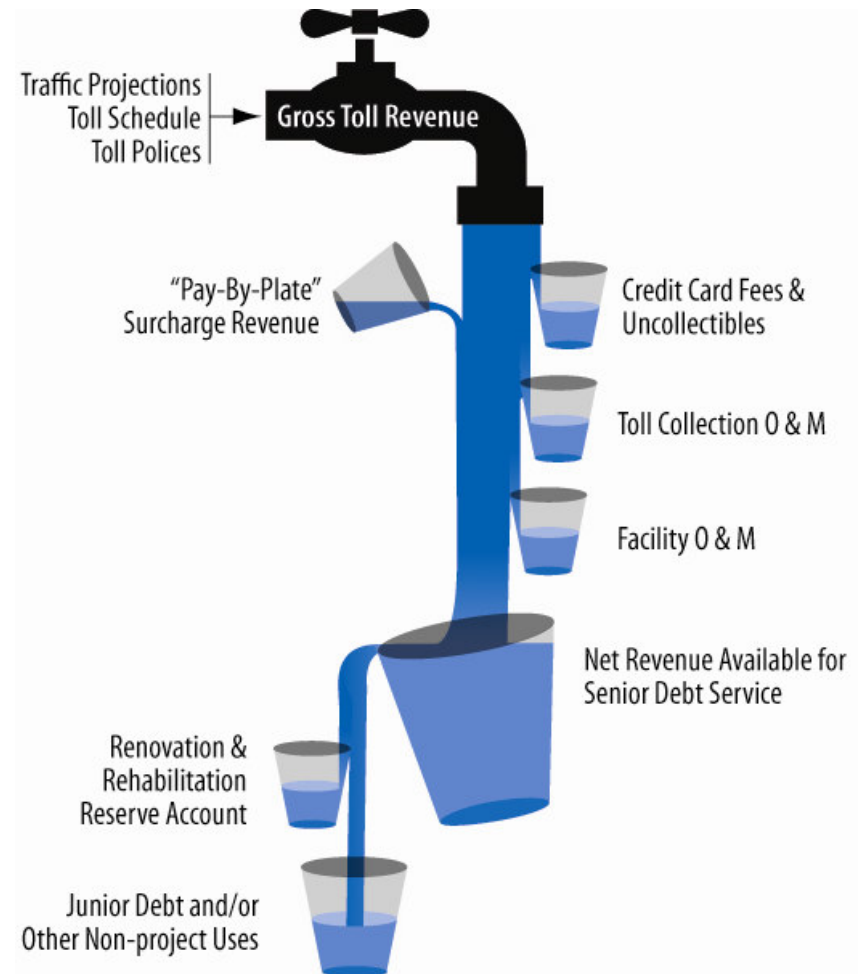
What's Next?

Financial Analysis:

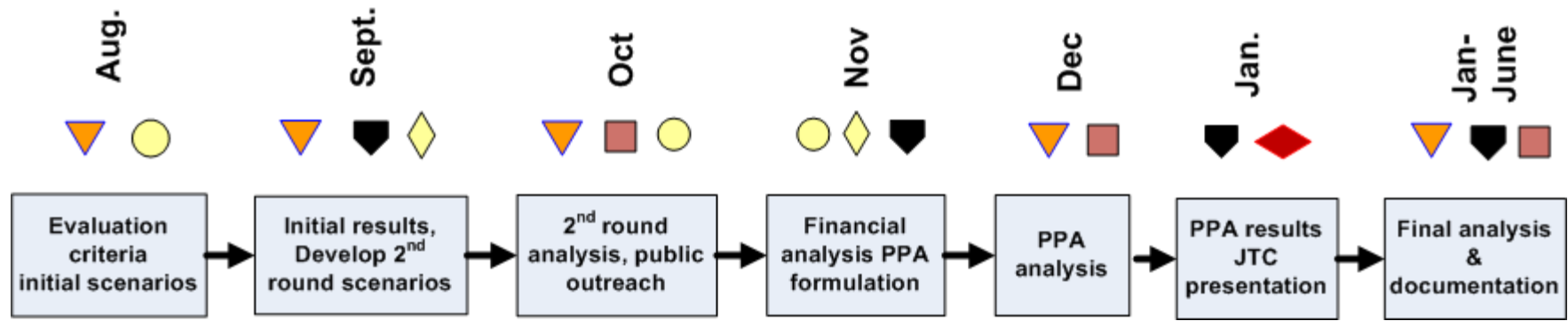
- Project annual gross revenue from 2020-2050
- Estimate on-going facility O & M costs
- Develop capital annual expenditure cash flow
- Estimate toll collection costs
- Assume financing conditions/interest rate
- Convert future revenue to net present value
- Deduct all necessary operating expenses.







From Gross to Net Revenues

- Gross toll revenues are typically pledged to cover toll collection & facility O&M ahead of debt service
 - Assures bondholders that the revenue generating asset will be maintained
- Net toll revenues = cash flow available to finance the project
 - The growing stream of revenue available for repaying project bonds
 - Coverage requirements dictate that net revenues exceed annual debt service payments



Overall Schedule & Next Meeting



-  Stakeholder Committee Meetings
-  Focus Group
-  Public Opinion Survey/Open Houses
-  WSDOT Toll Executive Team Briefing
-  Commission Presentations
-  JTC Presentation